

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (ORIGINAL) A method for reducing emission and fuel consumption in order to improve combustion in internal combustion engines, whereas, in order to achieve perfect combustion, prior to its entry into the combustion chamber of the internal combustion engine, the mixture of fuel and air is led through a treatment area characterized by specific physical properties, so as to provide, by applying high voltage, the air stream a charge of first polarity and the fuel stream a charge of opposite polarity, characterized by vibrating at least one of the air and the fuel stream by a frequency in the ultrasonic range.

2. (ORIGINAL) A method according to claim 1, characterized in that at least one of the air and the fuel stream is vibrated by a frequency in the ultrasonic range in the same section where the air stream and the fuel stream are charged with opposite polarities.

3. (CURRENTLY AMENDED) A method according to claim 1 ~~or 2~~, characterized in that the vibration is generated by an ultrasound generator.

4. (CURRENTLY AMENDED) A method according to ~~any of~~ claims 1 ~~to 3~~, characterized in that the at least one of the air and the fuel stream is vibrated in several sections.

5. (ORIGINAL) A method according to claim 4, characterized in that the at least one of the air and the fuel stream is vibrated in several successive sections.

6. (ORIGINAL) A method according to claim 4, characterized in that the at least one of the air and the fuel stream is vibrated in several parallel sections.

7. (CURRENTLY AMENDED) A method according to ~~any of~~ claims 1 ~~to~~ 6, characterized in that the exclusively either the air stream or the fuel stream is vibrated.

8. (CURRENTLY AMENDED) A method according to ~~any of~~ claims 1 ~~to~~ 7, characterized in that for the purpose of vibration frequencies in the range of 20 to 100 kHz, more preferably in the range of 35 to 45 kHz, will be used.

9. (ORIGINAL) An equipment reducing emission and fuel consumption in order to enhance combustion in the internal combustion engine, whereas the said equipment contains a first ionising unit providing the air stream with a charge of first polarity and a second ionising unit providing the fuel stream with a charge of opposite polarity, characterized by including at least one ionising unit which is equipped with means vibrating at least one of the air stream and the fuel stream by a frequency in the ultrasonic range.

10. (ORIGINAL) An equipment according to claim 9, characterized in that it is fitted with means vibrating both the air stream and the fuel stream.

11. (ORIGINAL) An equipment according to claim 9, characterized in that the vibrating means is a piezo-electric transducer connected to an ultrasound generator.

12. (CURRENTLY AMENDED) An equipment according to ~~any of~~ claims 9 ~~to~~ 11, characterized in that it includes several cascaded vibrating means.

13. (CURRENTLY AMENDED) An equipment according to ~~any of~~ claims 9 to 11, characterized in that it includes several vibrating means connected in parallel.

14. (ORIGINAL) An equipment according to claim 9, characterized in that the vibrating means is designed as a vibrating means with variable frequency, and/or it is designed as a vibrating means with variable signal amplitude.